

ABSTRACT

A beam deflection technique for simultaneous measurements of the thickness, refractive index and optical absorption of transparent materials using a charge coupled device (CCD) camera is provided. The method comprises measuring beam deflection after transmission through or reflection off a sample of interest at variable incidence angles to the sample surface. The measurement of beam deflection as a function of incident angle is related through Snell's Law directly to the sample thickness and sample index of refraction.